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PROPOSED FUTURE ROLE FOR THE ACUTE CARE
NURSE PRACTITIONER IN THE AIR FORCE

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Abstract - Proposed Future Role for the Acute Care Nurse Practitioner in the Air Force**141 words**

The Acute Care Nurse Practitioner (ACNP) is a masters prepared, advanced practice nurse that can fill a vital role in Air Force acute care and medical readiness settings. Civilian health care facilities value and capitalize on the contributions of ACNPs, especially in times of cost containment and decreasing resident hours. Despite thriving civilian ACNP practice, to date, the ACNP has not been introduced into military healthcare. ACNPs possess advanced knowledge in assessment, clinical decision-making, and patient management, adding an invaluable and clinically strong member to the Air Force healthcare team.

Perhaps it may be the title of "Acute Care Nurse Practitioner" and unfamiliarity with the role that causes apprehension. This article describes how these experienced nurses will contribute towards excellence in patient care, staff development, nursing recruitment and retention, and support the medical readiness mission of the Air Force Medical Service.

The Acute Care Nurse Practitioner (ACNP) can fill a vital role in Air Force medical readiness and acute care settings. However, issues such as validated need, the implementation process, delineation of ACNP roles and capabilities, start up funding, and manpower offsets must first be addressed. Civilian health care facilities are already familiar with the valuable contributions that ACNPs bring to the acute care environment, such as enhancement of care, patient satisfaction, and cost containment. These contributions are well documented in the clinical and research literature.¹ ACNPs in the Air Force could play a major role in healthcare optimization, nursing staff development, and nurse recruitment and retention. Likewise, the Air Force Medical Service's (AFMS) capabilities in wartime or peacetime, and the role in homeland defense could also benefit greatly from the potential contributions brought by ACNPs to the military healthcare environment. The purpose of this article is to describe how the ACNP can benefit the military and help current and future needs of the Air Force Medical Service (AFMS).

Definition and Role

Advanced Practice Nurses (APNs) are registered nurses who have completed either a masters or doctoral-level program preparing them for an advanced practice role. Generally speaking, "APN" is an umbrella term used for five categories: Nurse Practitioners (NP), Certified Registered Nurse Anesthetists (CRNA), Clinical Nurse Specialists (CNS), Certified Nurse Midwives (CNM), and combined Nurse Practitioners and Clinical Nurse Specialists (NP/CNS). Another designation, Acute Care Nurse Practitioners (ACNP) classifies nurses who assume the nurse practitioner role in critical care, acute care, and sub acute areas such as intensive care units, step-down units, specialty-based practices, and emergency departments. A list of specialty area work settings for ACNPs from a 1998 poll can be found at Table 1.²

Content areas addressed in ACNP curriculum include: health promotion and disease

prevention, comprehensive assessment, diagnosis of health and disease, treatment and management of health and disease, pathophysiology of disease, psychological, psychobiological and physiological processes of health, and use and interpretation of screening and diagnostic techniques (<http://www.aanp.org/Publications/AANP+Position+Statements/Position+Statements+and+Papers.asp>).³

Acute Care Nurse Practitioners manage complex patients, addressing both medical and nursing problems (<http://www.aanp.org/Publications/AANP+Position+Statements/Position+Statements+and+Papers.asp>).⁴ With appropriate training and privileging, ACNPs may also perform a multitude of activities such as suturing, endotracheal intubation, and chest tube removal.⁵ A list of sample activities and procedures performed by ACNPs in emergency departments is at Table 2.^{5,6} Although technical abilities are noteworthy, the role strengths are in the entire skill set as ACNPs apply diagnostic reasoning, critical thinking, and advanced therapeutic interventions in day-to-day patient management. This includes performing physical exams, writing progress notes, conducting ventilator management, interpreting diagnostic laboratory test data, and employing activities that optimize patient care. Indirect ACNP patient care activities include obtaining and providing consultations, planning for patient discharge, participating in quality assurance activities patient care conferences, providing educational presentations, and conducting counseling, team meetings, and research. Equally as important, ACNPs also support the nursing staff involved in the care of the patients.⁷

Previously, NPs were primarily seen as devoting most of their time in direct patient care. Yet, they also function in the sub roles of educator, researcher, and consultant. Because ACNPs are closely involved with patients, this involvement allows them to positively influence the professional development of clinical nurses and to form collegial working relationships with all

members of the healthcare team. ACNPs are expert clinicians who pursued graduate studies to enable them to take on more complex aspects of patient care. They perform patient management activities, but never disengage the nursing model nor sacrifice their identity with nursing.⁸ Despite potential AF unfamiliarity with the ACNP role in the AF, ACNPs have established clear acceptance and significance in the civilian sector. Kleinpell⁹ reported in a survey of 384 ACNPs that only 2 percent felt slow acceptance by MD staff, with 5 percent listing nursing attitudes as an issue. Although successful acceptance of the ACNP role in the Air Force acute care healthcare team will require a paradigm shift, once the ACNP role is introduced in the Air Force, perhaps a similar acceptance pattern will occur.

The need for the AFMS to deliver high quality peacetime care as well as being prepared for contingency operations are substantial reasons to consider designing new, collaborative practices in acute care areas (<http://www.nursingceu.com/NCEU/courses/advpracc/>).¹⁰ Past experience of the ACNP as a nurse combined with his/her competencies achieved through advanced education will create an invaluable AF healthcare team member. The introduction of ACNPs in the Air Force has been a frequent topic in informal discussions. It's time to consider a more formal look at the future role for ACNPs as part of Air Force peacetime and deployment healthcare teams.

Care Optimization

Advanced practice nurses (APNs) can be highly effective in delivering nursing education, decreasing healthcare costs, and increasing quality of care. Vollman¹¹ cited APN-initiated weekly conferences with nursing staff in a civilian MICU that led to an increase in staff's knowledge of pathophysiology by 50% and emphasized independent nursing functions that "could prevent complications and potentially decrease a patient's length of stay." Acute Care

Nurse Practitioners are adept at early identification of patient care issues that need prompt attention. This enhances efficiency and quality as knowledge is passed on to other healthcare team members. This is a crucial skill in healthcare environments where MD coverage is limited.¹² In the AF environment, limited MD coverage may exist in teaching facilities impacted by decreased number of residents or deployed personnel, making the ACNP very valuable. Aside from decreasing costs by decreasing hospital days, advanced practice nurses can also conduct organizational analysis, facilitate change, and capitalize on strengths in clinical nursing practice.

Utilization and outcomes data in a Philadelphia hospital emergency department (ED) showed that the ACNPs had a significant impact on the volume of patients treated during peak periods. The NPs in this Philadelphia hospital are considered a vital part of their ED; it was concluded that “for the cost of the salary of one physician, two NPs cover[ed] peak ED volume periods 7 days a week, provide[ed] care to twice as many patients as one ED physician, and complete[ed] follow up care.”¹³

As new standards limiting residency hours to 80 per week become effective in July 2003,¹⁴ teaching hospitals throughout the nation will be forced to implement plans to accommodate a potential decrease in resident coverage. The University of Maryland Medical System (UMMS) is a large teaching institution that successfully brought nurse practitioners into many acute speciality areas, including their pediatric intensive care service, in anticipation of decreased resident coverage in this setting. Administrators proposed alternate in-house coverage through the hiring of one NP. Being cautious not to imply substitution for residents, UMMS “identified skills ideally suited to the education and experience” of the pediatric critical care NP.¹⁵ This included continuity of care, case management, early discharge facilitation, provision

of technical assistance (in collaboration with supervisory medical personnel), and quality improvement and nursing education. The success of the UMMS NP initiative is illustrated by the addition of two more NP positions by the end of the first year. The UMMS process including the practice set up, definition of scope of practice, orientation, and responsibilities can serve as a future benchmark for a similar start-up in the AF.¹⁵

An advocate for ACNPs, Dr. Stuart Seides explained how ACNPs in his practice and those employed by Washington Hospital Center have greatly enhanced the care delivered to his patients and streamlined operations. Dr. Seides is chief of the second largest cardiology practice in the Washington DC area, and he asserts that NPs are key members of his healthcare team. Because the ACNPs perform the daily patient assessments, order and interpret labs, complete history and physicals, write discharge orders and prescriptions, and conduct patient education, this allows Dr. Seides and his medical staff to perform other diagnostic and interventional procedures. Additionally, he stated that NPs and MDs have different skill sets and “together, [they] provide much better care.”¹⁶

Civilian ACNP Utilization

Physician groups and medical institutions across the nation are increasing solicitation of ACNPs for their practice. The advanced nursing practice business is rapidly growing, especially in the national capital area. Washington Hospital Center (WHC), a 907-bed, acute care teaching and research hospital in NW Washington DC, and one of four academic health centers listed by LtGen Carlton as having a new role in homeland security,¹⁷ currently employs 73 nurse practitioners. The ACNPs are assigned in interventional cardiology, surgical critical care, neurosurgery, vascular surgery, and orthopedic inpatient units as well as cardiac surgery organ procurement, orthopedic and surgical oncology, and burn clinics (WHC is the most advanced

burn facility in the region). Washington Hospital Center has the 13th highest patient volume of medical centers in the US, owns the nation's third largest cardiac program, and houses one of the nation's top shock/trauma centers (MedSTAR). Much of the Center's success is in part attributable to the contributions of ACNPs.

Many other respected medical institutions have employed ACNPs for many years. The University of California-Davis Medical Center has used NPs in their trauma service for 16 years.¹⁸ The UC Davis staff considers having NPs on staff as an advantage, and have found the NPs also help educate new interns about differing aspects of nursing.

Callahan published implementation of the ACNP when Beth Israel Medical Center first established their cardiac surgery program. Beth Israel was a 900-bed facility in 1996 (over a 1300-bed capacity today). The cardiac surgical division lacked a residency or fellowship program; therefore, the division chief hired the first ACNP for this service. When the practice more than tripled, two more ACNPs were hired.¹⁹ Mount Sinai in New York employs over 160 NPs in a variety of settings including neurosurgery, transplant, cardiology, general surgery, and the emergency department.

Nursing Staff Development/Education

Many APNs have cultivated a passion for mentoring and motivating other members of the healthcare team--not just in nursing. Their credibility is also enhanced by previous years at the bedside and through heightened understanding of nursing issues. By sharing their expertise and by mentoring fledgling and experienced nurses, they can help shape AF nursing into cohesive, knowledgeable, and efficient teams. Civilian institutions have incorporated unit-based NPs to elevate nurses' assessment and critical thinking skills.²⁰ The national nursing shortage has prompted recruitment initiatives that, while partially helping to solve the quantity problem,

may inadvertently lead to a larger proportion of inexperience on nursing units. In this situation the Air Force Advanced Practice Nurses would be invaluable. They can dedicate full attention to application of advanced practice skills, caring for patients in the advanced practice role, mentoring and training nurses, and addressing system issues without the competing responsibility of their own fulltime clinical patient load. Unfortunately, the current AF nurse shortage has required that some APNs return to fulltime clinical bedside practice, crippling their ability to educate others as initially desired. The potential disadvantage is that the APNs are setting their skill sets aside, for undetermined times.

Recruitment/Retention

Multiple initiatives are underway across the nation to address nurse recruitment and national nursing organizations are actively engaged in the process. The American Association of Critical Care Nurses' (AACN) lists these three major contributing factors for the nursing shortage in a background paper: supply and demand, retention and workplace issues, and recruitment and image of nursing

(<http://www.aacn.org/AACN/pubpolicy.nsf/ad0ca3b3bdb4f33288256981006fa692/9998ed0647e3e28f88256a41007a7c1d?OpenDocument>).²¹

Addressing retention and workplace issues can prove challenging, especially in a military setting. AF nurses especially must value the significance of the work they perform as officers and nurses to appreciate fully how their work contributes towards achievement of the organizational mission. Additionally, AF nurses must know they work in environments that foster their growth (from clinical knowledge to professional development), and allow career progression--not just in promotion in rank. ACNPs can also help sustain an environment that will increase retention of AF nurses by inculcating clinical expertise backed by exemplary

officership. They can serve as examples and mentors for clinical nursing staff and help achieve the AACN priority of “providing leadership development, mentoring, and ongoing education” (<http://www.aacn.org/AACN/pubpolcy.nsf/ad0ca3b3bdb4f33288256981006fa692/9998ed0647e3e28f88256a41007a7c1d?OpenDocument>).²¹ As ACNPs support, mentor, and motivate clinical nurses, both will benefit from higher levels of job satisfaction--the advanced practice nurse by actually being able to use their skills, and the clinical nurse as a recipient of a mentoring/learning relationship, seeing the APNs as role models, and perhaps being driven themselves to pursue graduate studies. Nurses, like other professionals, will be more likely to remain in organizations where they feel excellence is cultivated and practiced.

Advanced Practice Nurses are in excellent positions to influence change and foster professional growth in clinical nurses.¹¹ The potential loss in not taking full advantage of the capabilities of advanced practice nurses would include suppressing other nurses’ aspirations to pursue advanced degrees themselves or worse, nurses may elect to leave the AF altogether. Secretary of the Air Force James Roche believes retaining people should be the service’s number one priority. He states “We have to care for each person... If we do well at retention, it helps recruit because people then say this is an elite group that’s worth being a part of for a career” (<http://www.af.mil/news/airman/0602/secaf.html>).²² Many AF advanced practice nurses have completed graduate education while on active duty, thus accumulating service commitment time. In all likelihood they possess a good understanding of and allegiance to the organization. These are precisely the officers we need to retain. Creating opportunities for ACNPs in the Air Force would incentivize these nurses and decrease the likelihood of losing them after service commitments are fulfilled.

Medical Readiness

As participation in military operations other than war (MOOTW) increase, so must the AFMS' ability to surge domestic operations and especially deployable medicine as the need arises. In some Air Force facilities, such as Keesler, high-cost contracts are established for civilian MD coverage in acute care areas affected by deployment of personnel. These are areas where ACNPs can be employed at lower costs. Regular practice in acute care settings will enable them to remain proficient in their advanced practice skills, preserving the Air Force investment in their graduate education. With dedicated time in the ACNP role, these nurses can remain proficient, build on their knowledge, and share the benefits with other nurses, the healthcare team, and patients. This would alleviate the need for refresher training, thus allowing these officers to remain mission ready at all times. As providers, ACNPs could increase medical readiness by expanding the patient treatment capability of deployable teams during disaster response, and homeland defense and humanitarian operations. This includes the Critical Care Air Transport Teams (CCATTs), Small Portable Expeditionary Aeromedical Rapid Response (SPEAR) teams, and Expeditionary Medical Support (EMEDS). ACNP presence can also directly support the AFMS core competencies of Contingency Healthcare, Fixed Wing Air Evac, International Healthcare, and Human Performance.

Funding Issues

The Air Force is facing challenges with increased responsibilities complicated by fiscal and manpower limitations; this makes start-up costs, identification of funding, and potential offsets for employment of ACNPs important issues to be addressed. Since the Air Force Medical Service currently has positions for Clinical Nurse Specialists (CNS) in acute care settings, but does not have authorizations for Acute Care Nurse Practitioners, it would be necessary to reallocate manpower before introducing ACNPs into the AF. The reality is that the AF graduates

officers yearly from combined acute care NP/CNS's or ACNP programs. An informal query to AF peers revealed three officers currently in a blended program and one in a dedicated ACNP program. In addition, there are at least five recent graduates from combined NP/CNS programs, but not all were assigned to advanced practice positions (even in a CNS capacity). A huge enhancement to AF healthcare delivery is being missed.

A Practice Model for the Air Force ACNP

The phase-in process for ACNPs into the Air Force must begin with thorough education of all members of the AF acute healthcare team. This should include a focus on ACNP education, scope, roles, and capabilities followed by the development of a practice model that will optimize care. At JFK Medical Center, a 387-bed community hospital in Palm Beach County, a collaborative practice model that blended the NP, CNS, and medical roles was developed. Goals in this medical center included increasing nursing staff's critical thinking and assessment skills, as well as having NPs serve as role models and mentors. JFK's objective was to create a nursing-based model that incorporated portions of a collaborative practice model.¹⁹

An update from JFK Medical Center in October 2002 revealed continued success in ACNP practice, reflected by growth in the number of ACNPs employed in their facility. With an AF decision to pilot ACNPs in selected AF medical treatment facilities, a collaborative practice model designed by experts in both AF medical and nursing communities will set the stage for success. Civilian benchmarks will ease defining future military ACNP scope of practice, designing the phase-in process, identifying the ACNP areas of responsibility, and clarifying the credentialing and privilege processes. A Canadian project looked at the process of incorporating acute care nurse practitioners in a teaching hospital. Over the course of two years, nursing researchers interviewed administrators, ACNPs, physicians, clinical supervisors, and staff nurses.

They examined the organizational changes associated with implementation of the NP role in the acute care setting and developed five key recommendations that would also assist a similar project in the Air Force.²³ The recommendations from this case study were:

- 1). Use of a specific model for change and ongoing evaluation.
- 2). Identification of a project champion and key support persons.
- 3). Clearly define and communicate expectations and anticipated outcomes from role implementation.
- 4). Define a process for communication between all interested parties and those affected by the role implementation.
- 5). Address organizational culture “shift” (may include redefining reporting structures) to allow full development implementation growth of the ACNP role and personal transition processes (role clarification).

Likewise, special consideration to Air Force officer leadership responsibilities, professional development, and career progression would be required.

Conclusion

The possibilities are endless. Air Force Medical Service, with its unique peacetime and wartime medical readiness taskings, is the perfect platform to embark on an Air Force ACNP pilot program in selected Air Force medical treatment facilities. The civilian community has long heralded and repeatedly shown the vast contributions of ACNPs in quality patient care and cost containment. ACNPs are educated and prepared to manage complex patients in ICUs and EDs; they can fill a vital role in peacetime and contingency medical operations. The impending resident hour limitations has further pushed institutions to develop ways to augment patient care, placing an additional challenge to military medical treatment facilities that are already feeling the

affects due to deployed medical personnel. As the ACNP role was developed as one solution in the civilian sector to address increased healthcare demands and turbulent health care environments,²⁴ perhaps it may be the use of the title “Acute Care Nurse Practitioner” that causes apprehension and hesitation for dialogue regarding utilization of these advanced practice nurses in the Air Force. But, ACNPs in Air Force practice would add a clinically strong nursing education resource that would also serve as an effective retention officer by serving as a model nurse. Acute Care Nurse Practitioner program graduates exist today within the Air Force as well as the other branches of service--many of them are graduates from blended CNS/ACNP programs. With a well-planned implementation strategy, a joint and cooperative enterprise can fully apply the capabilities of these caring professionals that are dedicated to the nursing profession and help propel AF healthcare into the 21st century.

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Specialty Area Work Settings of Acute Care Nurse Practitioners**Tertiary Care:**

Cardiothoracic ICU	Surgical ICU	Coronary ICU
Medical ICU	Emergency	Neurological ICU
Trauma	Oncology	Transplant
Internal Medicine	Stepdown unit/Telemetry	Orthopedics
Pulmonary unit	Interventional cardiology	Medical unit w/o house staff
Radiology	Craniofacial surgery	Presurgical testing

Secondary Care:

Medical rehabilitation	Subacute care	Urgent care center
Presurgical testing		

Table 1

ACNP Activities in Acute Settings

- 12-lead EKG interpretation
- radiographic interpretation
- laboratory test interpretation
- microscopy of blood, urine, and other bodily fluids
- relocating simple joint dislocations
- applying splints
- joint aspiration & reduction
- applying traction to lower extremities
- incision & drainage
- packing simple abscesses
- suturing and stapling of wounds
- layered wound closure
- nerve blocks
- suture removal
- digital & facial nerve blocks
- nail trephination & removal
- superficial wound debridement
- ear & eye irrigation
- slit lamp exams
- extensor tendon repair
- venisection
- sealing open chest wounds
- endotracheal intubation
- chest tube insertion
- needle decompression of the chest
- cricothyrotomy/tracheostomy
- emergency delivery
- lumbar punctures

Adapted from: Cole F, Ramirez E: Activities and procedures performed by nurse practitioners in emergency care settings, Journal of Emergency Nursing 2000; 26(5): 455-463

Table 2

Abbreviations/Definitions

AACN - American Association of Critical Care Nurses

ACNP - Acute Care Nurse Practitioner

AFNC - Air Force Nurse Corps

AFMS - Air Force Medical Service

AMSUS - The Association of Military Surgeons of the United States

APN - advanced practice nurse

CCATT - Critical Care Air Transport Team

CNA - certified nurse anesthetist

CNM - certified nurse midwife

CNS - Clinical Nurse Specialist

CRNA - certified registered nurse anesthetist

EMEDS - Expeditionary Medical Support

MANFOR - Manpower Force Packaging System

MTF - medical treatment facility

MURT - Medical Unit Readiness Training

NP - nurse practitioner

PA - physician assistant

SPEARR - Small Portable Expeditionary Aeromedical Rapid Response

UMMS - The University of Maryland Medical System

WHC - Washington Hospital Center

Table 3